

[DOCUMENT NAME] CLAIMS

[CLAIM 1]

A work transfer device for press machines, comprising:

5        a pair of bars provided on a moving bolster in parallel with a work transfer direction;

         a feed carrier held by the bars;

         a feed drive mechanism provided on the moving bolster, the feed drive mechanism driving the feed carrier in the work transfer direction;

10       a base held by the feed carrier;

         a lift drive mechanism provided on the moving bolster, the lift drive mechanism driving the base in a lift direction so that the base moves vertically; and

         a work holder detachably attached to the base for holding a work.

[CLAIM 2]

15       The work transfer device for press machines according to claim 1, further comprising:

         a clamp drive mechanism provided on the moving bolster, the clamp drive mechanism driving the base in a clamp direction perpendicular to the work transfer direction.

20       [CLAIM 3]

         The work transfer device for press machines according to claim 1 or 2,

         wherein at least one of the feed drive mechanism and the lift drive mechanism is provided with a linear motor.

[CLAIM 4]

25       The work transfer device for press machines according to claim 2, wherein the clamp drive mechanism is provided with a linear motor.

[CLAIM 5]

         The work transfer device for press machines according to claim 1 or 2,

         wherein at least one of the feed drive mechanism and the lift drive mechanism is

provided with a servomotor.

[CLAIM 6]

The work transfer device for press machines according to claim 2,  
wherein the clamp drive mechanism is provided with a servomotor.

5 [CLAIM 7]

The work transfer device for press machines according to any one of claims 1 to  
6,

wherein a plurality of the feed carriers are held by the bars, a motion of the each  
feed carrier being individually controllable.

10 [CLAIM 8]

The work transfer device for press machines according to any one of claims 1 to  
6,

wherein a plurality of the feed carriers are held by the bars, adjacent ones of the  
plurality of the feed carriers being connected to each other by a connector.

15 [CLAIM 9]

The work transfer device for press machines according to any one of claims 1 to  
6,

wherein a plurality of the work holders for plural working processes are  
detachably attached to the base.

20 [CLAIM 10]

The work transfer device for press machines according to any one of claims 1 to  
9, further comprising:

a bar-interval adjusting device for adjusting an interval between the pair of bars.

[CLAIM 11]

25 The work transfer device for press machines according to any one of claims 1 to  
10,

wherein the feed carrier can be moved to a position where the work holder is not  
projected from the moving bolster in a plan view of the press machine.